

XXVI.—*Notes on the Ornithology of Ceylon, collected during an eight years' residence in the Island.* By EDGAR LEOPOLD LAYARD, C.C.S.

[Continued from p. 176.]

68. PIPRISOMA AGILE, Blyth.

I procured a single pair of these birds along the Central road, but know nothing of their habits.

69. ORTHOTOMUS LONGICAUDA, Gmel.

Everywhere common. It builds in broad-leaved shrubs; the nest is generally composed of cottony fibres mingled with horse-hair, and enclosed between two leaves whose edges are sown together with cobweb. I once saw a nest built among the narrow leaves of the oleander (*Nerium odorum*); it was constructed entirely of cocoa-nut fibre, and at least a dozen leaves were drawn into the shape of a dome, and securely stitched together, a small entrance being left at one side. The eggs usually are from three to five in number, of a greenish white colour, with reddish quadrangular blotches at the thick end. The favourite prey of this species is spiders, and their cheerful cry of "*pretty, pretty,*" may be heard at all hours of the day among the coppices, through which with elevated tails and abrupt jerking motions they hunt for them.

70. CISTICOLA OMALURA, Blyth, J. A. S. xviii.

I first discovered this species in 1847 in paddy fields near Galle, and subsequently found it sparingly about Colombo, and abundantly in the fields of *gingelle* (*Sesamum orientale*) at Pt. Pedro. When alarmed they drop down to the roots of the grasses, and are flushed with difficulty. Their flight is weak, and sustained by short jerks, and when on the wing they utter a faint but not displeasing chipping note.

Dr. Kelaart says of this species, that "it is found in great abundance on Horton plains and Nuwera Elia, where they build their nests among the long patna grasses and reeds."

71. CISTICOLA CURSITANS, Blyth.

Is much less common than the preceding, and though found in the same locality, it frequents trees and jungle. Dr. Kelaart states he procured it abundantly at Trincomalie.

72. DRYMOICA VALIDA, Blyth, J. A. S. xx. 180.

Peculiar to Ceylon. Discovered by myself in 1848, and described by Mr. Blyth in J. A. S. xviii. under the name of *D.*

robusta. It frequents tufts of grass and low bushes in dry situations. It is rather a rare bird, and feeds on small insects of all kinds, which it seeks amid the bushes. It generally hunts in small parties, and traverses the branches up and down in a similar manner to *O. longicauda*. The iris is a light red-brown.

73. *DRYMOICA INORNATA*, Sykes.

Is common about marshes; it builds among reeds, the tops of which it draws together into a dome over the nest. The eggs, generally four in number, are verditer with purplish blotches and wavy lines which increase in density at the obtuse end.

74. *PRINIA SOCIALIS*, Sykes.

I obtained this species at Pt. Pedro in the fine grain fields; in habits it resembles *C. omahura*.

75. *ACROCEPHALUS DUMETORUM*, Blyth.

Mr. Blyth identifies our Ceylon bird with this species, but it is a distinctly marked variety with a faint greenish shade upon all its plumage. It is not uncommon, widely distributed, and to the best of my knowledge, migratory.

76. *PHYLLOPNEUSTE NITIDUS*, Blyth, J. A. S. xii. 965.

Migratory; appearing in Colombo in October, and frequenting all kinds of jungle. Its iris is dark hair-brown.

77. *PHYLLOPNEUSTE MONTANUS*, Blyth.

Mr. Blyth, in his Catalogue of the Birds in the Museum of the Asiatic Society of Bengal, gives the Himalayas as the habitat of this species; I procured it on the low plains of Pt. Pedro, where also another Himalayan bird, *Lanius erythronotus*, Vigors, is common. The present species is migratory, and abounds in low thick bushes in company with

78. *PHYLLOPNEUSTE VIRIDANUS*, Blyth.

The irides of both are dark hair-brown.

79. *COPSYCHUS SAULARIS*, Linn. *Polichia*, Cing. *Caravy coorovi*, Mal.; lit. Charcoal Bird.

This familiar household bird is called the "*Magpie Robin*" by Europeans, and the natives regard it with as much interest as we do our own red-breasted favourite, of which it is the Eastern representative. It is seldom seen away from habitations, about which it usually builds, though the nest is often placed in a thick bush

or hollow tree. The eggs, commonly four in number, are bright blue, thickly spotted with brown at the obtuse end. The food is insects of all kinds, and in all stages, captured on the ground and on trees. They have a variety of notes, and the song poured out in the fulness of their joy in the pairing season is very pleasing. On the top of a towering cotton-tree, opposite my last residence in Colombo, a magpie robin daily for some weeks charmed me with his song, whilst his mate sat brooding her eggs, or callow nestlings, in the roof of a native hut beneath him. One morning, after the young had left their cradle and betaken themselves to the neighbouring compounds, I was attracted by cries of distress from various birds and squirrels, and above all I heard the seemingly plaintive mewling of a cat. I had no *living* specimen of the last in my museum, so wondering what could be the matter, went into my garden to see. I found the mewling proceeded from my friends the robins, who were furiously attacking something in a bush, whilst the birds and squirrels screamed in concert. There I found one of the young robins, whose plumage by the way at that early age much resembles that of the European bird, being brown speckled with yellow, caught as I thought in the tendrils of a creeper; I put out my hand to release it, when to my surprise I saw the glittering eyes of the green whip snake (*Trimesurus viridis*, Lacép.), in whose fangs the bird was struggling. I seized the reptile by the neck and rescued the bird, but too late; it lay panting in my hand for a few moments, then fluttered and died. On skinning it I found no wound, except on the outer joint of the wing by which it had been seized, and am confident that fear alone deprived it of life.

A favourite attitude of this species is standing, with the tail elevated over the back, either perpendicularly or thrown so much forward as to nearly touch the head, the wings drooping; in this position they only utter a low note. Swainson has described as *Gryllivora rosea* a bird of this species; it is probably nothing more than one whose feathers were stained by the dust of our red kabook soil. During the long dry season some of our birds become so discoloured with this that they are useless as specimens.

80. COPSYCHUS MACROURUS, Gmel.

The first time that I fell in with this exquisite songster will ever be impressed on my memory as connected with the beauties of tropical scenery. I arrived at Kandy one evening, and started the next morning collecting, and by chance took the road round the hill at the back of the Pavilion, called "Lady Horton's Walk." A few birds, which though common there, were rare in the Southern Province, had rewarded my labour.

The morning air was deliciously cool and bracing, both from the altitude and a shower of rain that had-fallen over night, and I walked joyously along, delighted with my birds, and the luxuriant vegetation around me; at length under a bank I saw a fine shell, then new to my collection; my attention was thus confined to the side of the road in hopes of finding another, and unconsciously I reached a bend at the summit of the hill. Here a singular scene presented itself. I stood on the edge of an abrupt descent; at the bottom of this, stretched like an ocean, lay a thick fog bank, through which the tops of some lofty cocoa-nut trees here and there appeared, like beacons marking the site of submerged villages; all was silent, save that the occasional voice of some denizen of the grove showed that the feathered tribes were awakening. Suddenly the sun broke forth in its splendour, and with it a light breeze sprung up, the fog seemed endued with life, and heaved and rolled in noble masses; presently it rose a little and moved away down the valley melted into air, and a glorious landscape burst upon me. Below, meandering like a silver ribbon through the rich green patnas, wound the Mahavilla Ganga; here brawling over rocks, it fell in mimic cascades whitening the surface with foam, or flowing stilly, its darkness betrayed its depths. Far away stretched a noble expanse of patna, broken occasionally by belts of forest, and dotted with small clumps or isolated trees, till it was bounded by a lofty range of mountains, whose tops glowed in the light of the morning sun as if bathed in flame. Behind me and on the ledge where I stood, some gigantic forest trees reared their heads, their aged trunks covered with ferns and air plants. Immediately below my feet, reaching to the river, stretched a dense mass of foliage, relieved here and there by the graceful feathery branches of the areka or jaggery palm, or the vast leaves of the talipat. All nature seemed to awake—the woodlands resounded with the cooing of doves and the voices of hidden songsters. The green and yellow and red lizards (*Calotes viridis* and *versicolor*) crept up the topmost sprays of the bushes and sunned themselves, while the heavy flight of the gorgeous black and yellow butterfly (*Papilio darsius*), dipping into the mingled flowers which tempted it, contrasted pleasingly with the light and airy floating of the sombre-hued sylph butterfly (*Hestia hyblea*). I gazed with delight upon a scene so fair and so congenial to the eye of a field naturalist, till, unpleasantly reminded by a sharp pricking about my legs, that I stood too near the grassy margin of the road and was in the midst of land leeches, who delight in blood and not in scenery, I was covered with them, having forgotten my leech gaiters, and had no resource but to retreat to a large stone, and pick them off as well

as I could. So employed, I remarked that one of the songs which so charmed me was new; it came from a dark part of the jungle, and regardless of the tormenting leeches, I crept in on hands and knees, and peering about discovered a lovely bird, with two long and broad tail-feathers, piping most sweetly. Poor thing! its melody caused its destruction, and as its bright eye became dim, I thought there were many kinds of blood-seeking land leeches in this world.

Often since, but only in dense jungles and at early morn, or amid the lengthening shadows of evening, have I heard the clear note of the *Copsychus*, and that lovely scene has recurred to me in vivid distinctness.

81. PRATINCOLA CAPRATA, Blyth.

I procured specimens of this bird at Ambegamoa, and Dr. Kelaart includes it in his list as "found in the lower parts of the Kandian country."

82. PRATINCOLA ATRATA, Kelaart.

Of this species Dr. Kelaart writes,—“Confined to the highlands; we have not met with it on lower hills than Rambodde. It is very numerous on the plains of Nuwera Elia, sometimes seen in pairs and often singly. The male bird perches on a twig of a small plant, or on a reed, and the female on the ground not far off; but rarely more than two or three pairs are seen in the same locality. They frequent gardens and flower-beds in search of insects.”

I procured a pair at the foot of Adam's Peak.

83. CALLIOPE CYANA, Blyth.

A few specimens procured at Pt. Pedro, in passage, about the middle of October 1851.

84. THAMNOBIA FULICATA, Lind. *Cary cooroovi*, Mal.; lit. Black Bird.

This is another of our household favourites, frequenting equally the Governor's palace and the native hut. It is never seen in the unfrequented jungle, but like the cocoa-nut tree, which the Cingalese assert will only flourish within the sound of the human voice, is found about the habitation of man. It feeds on insects of all kinds, and like its congener the magpie robin, sits much upon house-tops or fences, with its tail elevated, and utters a pleasing song. I have procured their nests, which are composed of hair, mosses and dry grasses, in the months of June and July

in Colombo, in December and April in the north. The eggs are from three to five in number.

85. *CYANECULA SUBCICA*, Linn.

I procured a few specimens at Ambegamoa in the month of March, but have not seen them elsewhere.

86. *SYLVIA AFFINIS*, Blyth.

I noticed a few of this species at Ambegamoa in the year 1848, but I never afterwards met with it.

87. *PARUS CINEREUS*, Vieill.

This titmouse is not uncommon throughout the island; its habits resemble those of our own well-known bird, hunting in small parties, and flitting from tree to tree.

88. *ZOSTEROPS PALPEBROSUS*, Temm.

The "white eye" is common in the southern and midland districts, but rare towards the north. It is usually found in small parties creeping about blossoming trees, examining the flowers where it finds its food. It builds a cup nest fixed in the fork of two branches.

Dr. Kelaart includes—

89. *ZOSTEROPS ANNULOSUS*, Swains.,

among the birds he procured in the hills, but writes, "We fear that the Nuwera Elia *Zosterops* is wrongly identified. It is of a darker green than the common *Z. palpebrosus*." I however much doubt the distinctness of this and the preceding, and also of the two succeeding species.

90. *IÖRA ZEYLANICA*, Gmel. *Kirikahaye* and *Ca-cooroolla*, Cing.; lit. Yellow Bird (being also the native designation of the two preceding species). *Mam-palla-coorovi*, Mal.; lit. Mango Fruit Bird, from its colour.

Is extremely abundant, generally found in pairs creeping about trees. The note of this pretty little bird is a clear bell-like whistle, which may be imitated on an octave flute.

91. *IÖRA TYPHIA*, Linn.

If this is really distinct from *I. Zeylanica*, we also have it, and in the same localities.

92. MOTACILLA BOARULA, Linn.

Of this I have seen but two specimens, and those I shot off the summit of an American cork-wood tree, in the Botanical Garden at Kew, on the Colombo Lake. However, Dr. Kelaart writes, "that it is generally seen on the highland patnas."

93. MOTACILLA INDICA, Gmel. *Gomarita*, Cing.; lit. Dung-spreader.

This elegant little bird is frequently met with in shady places where cattle have been. They scratch among the ordure in search of the larvæ of insects, hence their native name. Migratory.

94. MOTACILLA MADRASPATANA, Briss.

I detected a single specimen in a collection of birds formed by F. W. Gisburne, Esq., C.C.S., in the Jaffna Peninsula. I do not know the exact locality where it was killed, but believe it to have been in the island of Valenny.

95. BUDYTES VIRIDIS, Scop.

Common on all open grass land, either in the mountainous or lowland districts. It is migratory, visiting us about the end of October and staying till May.

96. ANTHUS RICHARDI, Temm. *Pullu puraki*, Mal.; lit. Worm Picker,—a name common to all the genus and to the *Alaudinæ*.

Common and widely distributed, affecting low pasture lands. They rise in the air to a slight altitude, and sing like the European skylark (but not so sweetly) and return to perch on low bushes. In common with all our Pipits, they feed on small grubs and worms.

97. ANTHUS RUFULUS, Vieill.

Is far more abundant than the last and is found in large open plains, whilst *A. Richardi* prefers the vicinity of trees. It breeds in May, in a small depression of the soil or tuft of grass, slightly lined with dead fibres; the eggs, usually five in number, are of a verditer ground, freckled with minute brown spots.

98. ANTHUS STRIOLATUS, Blyth, J. A. S. xvi. 435.

According to Dr. Kelaart is very common at Nuwera Elia. I obtained a few specimens at Gillymally, on the lovely open plain where the village is situated.

99. BRACHYPTERYX PALLISERI, Kelaart.

One of the novelties added by Dr. Kelaart to our Ceylon fauna; he obtained it at Nuwera Elia and Dimboola; it is however rare.

100. DRYMOCATAPHUS FUSCOCAPILLUS, Blyth.

This genus was established by my friend Mr. Blyth for the reception of a small bird, of which but two specimens fell under my notice. One I killed with a blow-pipe, in my garden in Colombo, the other I shot in the Central road; their stomachs contained insects. The birds crept about bushes and shrubs like *Dumetia albogularis*. Mr. Blyth's description and remarks are as follows: "Like *Dr. nigrocapitatus*, but the supercilia, uniform with the lores; ear-coverts, sides of neck, throat, and entire under-parts, pale ferruginous brown, a little deeper on the breast; coronal feathers dark brown, margined with dusky black and pale striped, rest of the upper parts uniform grayish olive-brown; the primaries margined paler and the extreme tips of the tail-feathers rufescent; bill pale, the upper mandible dusky; feet pale. Length about $6\frac{1}{4}$ in., the wing $2\frac{7}{8}$ in., and tail $2\frac{1}{2}$ in.; bill to gape $\frac{1\frac{3}{8}}$ in., and tarsi 1 in."

101. ALCIPE NIGRIFRONS, Blyth.

Peculiar to Ceylon and widely distributed. I discovered it in 1848. It frequents low impenetrable thickets, and its curious note often betrays its propinquity, when itself is closely hid. The irides are pale straw colour, and an egg which I took from the abdomen of the bird in the month of June was pinkish, spotted with dark purple.

Of this species Mr. Blyth says, "Closely affined to *A. atriceps*, Jerdon, from which it differs in not having the whole crown black, but only the forehead continued as a line backward over each eye and the ear-coverts. The tail also is darker and distinctly rayed with dusky black. General hue fulvous brown above and on the flanks and lower tail-coverts; rest of the under parts pure white, the axillaries tinged with rufescent. Wing $2\frac{1}{4}$ in."

102. PITTA BRACHYURA, Jerd. *Tota collan*, Mal.; lit. Garden Thief. *Avitchia*, Cing., from its cry, which the syllables pronounced slowly and distinctly, thus *A-vitch-i-a*, much resemble.

This lovely ant thrush is very common, but more often seen than heard. It is wary and shy in its habits, and frequents

tangled brakes and the ill-kept native gardens. It preys much upon ants and resorts to the same hill for days together. It seldom alights on trees, only perhaps when alarmed, but keeps exclusively to the ground, or to the lowest branches of the underwood. It is migratorial, preceding the snipe in its arrival and departure.

103. OREOCINCLA SPILOPTERA. *Val-avitchā*, Cing. ; lit. Wild Avitchī. Blyth, J. A. S. xvi. 142.

Peculiar to Ceylon and only found in the hilly zone, affecting high trees. I procured a specimen or two, both at Ambegama and Gillymally. Dr. Kelaart does not appear to have met with it at Nuwera Elia, for though he includes it in his catalogue, he does so on the authority of Mr. Blyth. Dr. Templeton discovered this species.

104. MERULA WARDII, Jerdon,
and

105. MERULA KINNISSII, Kelaart.

Neither of these have fallen under my immediate notice. Dr. Kelaart procured the first at Dimboola and the second numerous at Nuwera Elia. Mr. Mitford shot one (the only animal life he saw there) at the very summit of Adam's Peak, feeding on the crumbs of rice thrown out by the pilgrims as an offering to Buddha; and when Mr. Thwaites, the Superintendent of the Botanical Gardens, botanized on the Peak, he also saw a bird there, though it was much too soon for the pious offerings. Male jet-black, with orange-coloured legs, bill, and cere surrounding the eye. Female ashy; bill and feet yellow. Length 9 in.; of wing $4\frac{1}{2}$ in.; tail 4 in.; bill to gape $1\frac{1}{8}$ in.; tarsi $1\frac{1}{8}$ in.

106. GARRULA CINEREIFRONS, Blyth.

Another addition to our fauna by Dr. Kelaart. I do not know where he found it, but I obtained several specimens along the banks of the Calloo Ganga, about forty miles inland from Caltura, and one at Pallabaddoola, close to the source of the river in the Peak range. In habits it much resembles the *Malacocerci*, hunting in small parties and incessantly calling to each other. In the stomachs of those I examined were grubs, small snails, coleoptera and seeds. Affined to *G. Delesserti* of the Nilgiris, but differing much in its colouring. General hue a rich brown above, much paler below; forehead and cheeks pure ashy; chin and borders of the outer primaries albescent; bill blackish; legs dusky corneous. Length $8\frac{1}{2}$ in.; of wing $4\frac{1}{2}$ in.; tail 4 in., the outermost feathers $1\frac{1}{8}$ in. less; bill to gape $1\frac{1}{4}$ in.; tarsi $1\frac{1}{4}$ in.

107. POMATORHINUS MELANURUS, Blyth, J. A. S. xvi. 451.

I long considered this one of our rarest birds, and had but a single specimen which I obtained from a native. However, going on duty, a few miles from Colombo, on the road to Kandy, in the low, scrubby and almost impenetrable brushwood, growing on the chenas which had fallen out of cultivation, I found these birds in abundance in small parties of six or eight, their singular churring cry resounding in all directions. I also found it in the Balcadua Pass, and Dr. Kelaart at Nuwera Elia. They creep about bushes like the *Certhiadae*, and feed on insects.

108. MALACOCERCUS GRISEUS, Gmel.

Included by Dr. Kelaart in his list, sed non vidi.

109. MALACOCERCUS BENGALENSIS, Briss. *M. striatus*, Swains. *Demalichia*, Cing. *Punil*, Mal. *Pastru bragaru*, Port. Mud Bird, English.

This is one of our commonest birds, frequenting the roadsides and scratching among fallen leaves and the ordure of animals for its insect prey. They are always seen in small parties varying from three to seven, according to the number of young ones in a nest, which seem to remain with their parents until the period of incubation again commences, when they separate to form families of their own. When alarmed an old bird utters a piping note, making several prodigious hops, and takes to flight; his example is followed by all the rest in succession, and the whole party wing their way in a long file, alternately beating the air with heavy strokes, or sailing along on their rounded wings to a place of safety. Their nest is composed of fibres (generally those of the cocoa-nut husk), and placed in low bushes. So loosely is the structure put together that the eggs are plainly visible through it; they are of a perfect oblong and of a lovely blue verditer colour.

110. MALACOCERCUS RUFESCENS, Blyth, J. A. S. xvi. 453. *Kalaparandal*, Cing.

This new species of *Malacocercus* was discovered by Dr. Templeton, R.A., and described *loc. cit.* It is peculiar to the island and confined to the southern and midland districts, in thick jungle only. In habits it resembles the preceding species, but conceals its nest with so much care, that I never succeeded in obtaining information about it, even from the natives. The iris is white, and the cere round the eye, of the bill and of the legs, is a bright orange-yellow.

111. DUMETIA ALBOGULARIS, Blyth, J. A. S. xvi. 453.

Confined to the vicinity of Colombo and not uncommon; it is generally found in small flocks about the cinnamon and other low bushes, creeping about in search of insects.

112. CHRYSOMMA SINENSE, Lath.

This bird, or a pale variety, is not unfrequent near Caltura and in the Pasdoom Corle. I also observed a few specimens in the Anarajahpoora Wanny.

It hunts in small flocks about low bushes.

[To be continued.]

XXVII.—*Remarks on the Lias at Fretherne near Newnham, and Purton near Sharpness; with an Account of some new Foraminifera discovered there; and on certain Pleistocene Deposits in the Vale of Gloucester.* By the Rev. P. B. BRODIE, M.A., F.G.S.*

I AM afraid that the few observations I have to offer on the strata and fossils at Fretherne Cliff will present little novelty or importance; still there are a few points of interest to which I wish to draw the attention of our Members, and which seem to deserve a short notice. The Lias here rises in the shape of a low cliff at the end of a round hill between Saul and Arlingham. You are aware that the Severn in its course below Longney makes a great curve, so that the low lands in this district are bounded on three sides by the river, but the generally flat aspect of the scenery is relieved by the picturesque and bold outlines of the Oolitic hills on the east and south-east, and the Palæozoic system of May Hill and the Forest of Dean on the west and north-west. There are several cliffs on the banks of the Severn where the Lias is exposed between Gloucester and Aust Passage. Westbury is, I believe, the first of these below Gloucester, which I have already described (Fossil Insects, p. 58), but most of them exhibit the lowest beds of the Lias resting on the Red Marl, and contain a peculiar and on the whole distinct assemblage of organic remains. To this Fretherne and Purton form an exception, as the small sections exposed there consist of the lower Lias overlying the "Ostrea bed," equivalent to certain other portions of the series in the Vale of Gloucester, as at Hatherly, the Leigh, Piffs Elm, Hardwicke, &c. The upper part of the former cliff is composed of several layers of grayish white and blue lime-

* Read to the Cotteswold Naturalists' Club (Meeting at Sharpness), May 3, 1853.